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THE COGNITIVE ENVIRONMENTS OF URBAN PRE-SCHOOL CHILDREN. MANUAL OF INSTRUCTIONS FOR ADMINISTERING AND SCORING FIRST DAY.

BY- HESS, ROBERT D. AND OTHERS
CHICAGO UNIV., ILL., URBAN CHILD CENTER

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THIS MANUAL DESCRIBES MEASURES USED IN "THE COGNITIVE ENVIRONMENTS OF URBAN PRE-SCHOOL CHILDREN" PROJECT AT THE UNIVERSITY OF CHICAGO. THE SAMPLE FOR THE STUDY CONSISTED OF 163 NEGRO MOTHER-CHILD PAIRS SELECTED FROM 3 SOCIOECONOMIC CLASSES BASED ON THE FATHER'S OCCUPATION AND THE PARENTS' EDUCATION. A FOURTH GROUP INCLUDED FATHER-ABSENT FAMILIES. THE MOTHERS WERE INTERVIEWED AT HOME AND THE MOTHERS AND CHILDREN WERE TESTED AT THE UNIVERSITY OF CHICAGO WHEN THE CHILDREN WERE 4 YEARS OLD. FOLLOW-UP DATA WERE OBTAINED WHEN THE CHILDREN WERE 6 AND AGAIN WHEN THEY WERE 7. EACH MOTHER WAS ASKED HOW SHE WOULD PREPARE HER CHILD FOR THE FIRST DAY OF SCHOOL. THE RESPONSES WERE TAPE RECORDED AND TRANSCRIBED AND WERE SCORED FOR CONTENT AND METHOD OF COMMUNICATION. SUBJECT-PREDICATE PAIRS WERE USED AS THE BASIC SCORING UNITS WITH EXCEPTIONS BEING MADE FOR OBVIOUSLY DEPENDENT CLAUSES. IMPLIED SUBJECTS AND VERBS WERE SUPPLIED WHEN CLEARLY INDICATED. THE NUMBER OF THESE UNITS WAS TALLIED AND THEN SCORED FOR CONTENT ACCORDING TO THE CATEGORIES (1) OBEDIENCE, (2) ACHIEVEMENT, (3) AFFECTIVE ELEMENTS, AND (4) PREPARATION. THE METHODS OF COMMUNICATION WERE CLASSED AS IMPERATIVE OR INSTRUCTIVE. THIS IS A PART OF THE HOME INTERVIEW DESCRIBED IN PS 000 475. (DR)

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THE COGNITIVE ENVIRONMENTS OF URBAN PRE-SCHOOL CHILDREN

Robert D. Hess, Principal Investigator

MANUAL OF INSTRUCTIONS

FOR ADMINISTERING AND SCORING

FIRST DAY

The measures described in this manual were developed in the project, Cognitive Environments of Urban Pre-School Children, supported by: Research Grant #R-34 from the Children's Bureau, Social Security Administration, and the Early Education Research Center, National Laboratory in Early Education, Office of Education, both of the U.S. Department of Health, Education, and Welfare; the Division of Research, Project Head Start, U.S. Office of Economic Opportunity; the Ford Foundation Fund for the Advancement of Learning; and grants-in-aid from the Social Science Research Committee of the Division of Social Sciences, University of Chicago.

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THE COGNITIVE ENVIRONMENTS OF URBAN PRE-SCHOOL CHILDREN

The research sample for the Cognitive Environment Study was composed of 163 pairs of Negro mothers and their four-year-old children, from three socioeconomic classes, defined by father's occupation and parents' education: upper-middle, professional and executive, with college education; upper-lower, skilled and blue collar, with high school education; lower-lower, semiskilled and unskilled, with no greater than tenth-grade education; a fourth group included father-absent families living on public assistance, otherwise identical to the lower-lower class group.

Subjects were interviewed in the home, and mothers and children were brought to the University of Chicago campus for testing, when the children were four years old. Follow-up data were obtained from both mother and child when the child was six years of age, and again at seven years.

Principal Investigator for the project is Professor Robert D. Hess, formerly Director, Urban Child Center, University of Chicago, now Lee Jacks Professor of Child Education, School of Education, Stanford University.

Co-Investigator for the follow-up study is Dr. Virginia C. Shipman, Research Associate (Associate Professor) and Lecturer, Committee on Human Development, and Director, Project Head Start Evaluation and Research Center, University of Chicago, who served as Project Director for the pre-school phase of the research.

Dr. Jere Edward Brophy, Research Associate (Assistant Professor), Committee on Human Development, University of Chicago, was Project Director for the follow-up study and participated as a member of the research staff of the pre-school study.

Dr. Roberta Meyer Bear, Research Associate (Assistant Professor), Committee on Human Development, University of Chicago, participated as a member of the research staff during the pre-school and follow-up phases of the project and was in charge of the manuscript preparation during the write-up phase of the research.

Other staff members who contributed greatly to the project include: Dr. Ellis Olim, (University of Massachusetts, Amherst) who was responsible for the major analysis of maternal language; Dr. David Jackson, (Toronto, Ontario) who was involved in early stages of development of categories for the analysis of mother-child interaction, and participated in the processing and analysis of data; Mrs. Dorothy Runner, who supervised the training and work of the home interviewers, acted as a liason with public agencies, and had primary responsibility for obtaining the sample of subjects; and Mrs. Susan Beal, computer programmer.

COGNITIVE ENVIRONMENT STUDY

FIRST DAY MANUAL

SUMMER 1967

INTRODUCTION

ADMINISTRATION

During the home interview, mothers were asked the "First Day" question:

"LET'S IMAGINE THAT _____ IS OLD ENOUGH TO GO TO THE PUBLIC SCHOOL FOR THE FIRST TIME. HOW DO YOU THINK YOU WOULD PREPARE HIM/HER? WHAT WOULD YOU DO OR TELL HIM/HER?"

Neutral probes were used: the interviewer was asked to "Probe without giving suggestions, as far as possible (e.g., "Anything else?" or "Tell me more.") If it doesn't come out spontaneously, be sure to ask: 'What will you tell him/her about that first day at school?'" Mothers' responses were tape-recorded and typed transcripts or "protocols" were later prepared for scoring purposes.

SCORING

The focus in scoring the mothers' responses is on the transmission of information from mother to child. The responses cannot be taken as predictions of what any mother will actually say to

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her child as that first day nears, but the open-ended question is used here as a projective technique to assess the subject's estimation of the relevant areas of the school situation (content analysis). In addition, the measure provides a sample of the subject's language style and method of communication which is suitable for comparison to other more direct measures (method of communication). In scoring the responses, both content and method of communication are taken into account.

UNIT OF SCORING

The informalities of the spoken language and the punctuation introduced by those transcribing the tapes of the mothers' interviews create many difficulties in defining a meaningful unit for scoring. Most commonly, there appear written sentences which are composed of many completed thoughts, or many "thought-sentences". That is, conjunctions and punctuation marks which connect (such as , ; -, etc.) create a smooth-reading flow which for scoring purposes must be broken down into message units. A completed thought is composed of essentially the <u>subject-and-predicate pair</u>. If a dependent clause is used with relation to an independent clause, both clauses constitute a simple unit. Exception is made in one case: where a subordinate conjunction (e.g., "because") introduces a new complete thought, the following phrase is coded as though it were independent of the unit(s). Subjects and objects are often assumed by the mother, as for example when she says, "to mind," and obviously means, "I would tell him to mind." Such a phrase usually constitutes a meaningful unit.

In order to assess proportionate use of each type of response within a single protocol, as well as to compare subjects for simple presence or absence of differential attention to any given category of response, it is important that every grammatically meaningful unit is counted. Although many such units do not answer the question and are not meaningful in terms of the scoring categories being used, these units are tallied: the "Irrelevant" category provides for their scoring.

Excluded units are those which are not a response to the question, but are a part of the subject's conversation with the interviewer or with others, or are a part of the behavior of the subject as she "settles in" in preparation for her response: "Ummm, when do I begin?", "Is it on?" (referring to the mike), or "Shut up, Joey" (aside to a child). A concluding "That's all" or "I can't think of anything else," when it is in response to the interviewer's question "Anything else?," is not scored. And responses to a biased probe question by the interviewer (e.g., "What would you tell him about the teacher?" or "Would you tell him to_____?") are not scored.

The unit of scoring, then, is <u>a completed thought</u>, although it may not necessarily be a sentence. Verbatim or essential repetition of a completed thought will be counted for as many units as the subject uses to express herself. All elaborations of and additions to a completed thought are similarly tallied, so long as each addition or elaboration is itself a completed thought.

A tally of the total number of units is made before any attempt at categorizing and scoring. This tally is made in grammatical terms as described above. Although the scorer cannot avoid being aware of the content of the protocol and of each unit as it is so tallied, every attempt is made to ignore the meaning of the message and to concentrate on the subject-and-predicate structure until after the tally is completed and actual scoring begins. Similarly, each unit is coded by content without reference to the content of other units, except as specified below.

CATEGORIES FOR CODING OF CONTENT

OBEDIENCE

When the mother depicts school as a situation to which her child will have to conform by obeying the teacher, by acting in a socially acceptable manner with peers, or by following some impersonal set of institutional rules, her comments on the child's behavioral conformity are coded in the following content areas:

Teacher: The teacher's role in the classroom is one of authority. She is in charge, and the child must be prepared to obey her. The person-to-person relationship of teacher and child distinguishes this category from the others (e.g., categories relating to the issue of obedience, particularly that of classroom conformity.)

Classroom: The child's behavior as a member of a group, his class, should be one of conformity to rules which may be implicit or explicit. He is expected to deport himself in a manner which

will allow the smooth running of the classroom as a learning environment. The conformity expected and demanded in the classroom does not refer merely to the behavior occuring within the four walls of the room, but to the behavior required of a child in a group which is concerned with some learning experience provided by the school and the teacher. Thus the conforming behavior in the classroom specified by the mother may relate to the social-peer structure rather than to the learning experience. The fact that classroom conformity is of a more restrictive nature than social-peer conformity may help clarify this distinction.

Social and peer: The child is constantly confronted with people, mostly other children, both within the confines of the classroom and in the larger world of the school and neighborhood; he must learn to interact in a socially acceptable manner. Some aspects of this conformity may be made explicit by the mother or the teacher; others are open to be determined by other children within the context of a specific situation such as a game.

Institutions: There are a number of rules and standards to which a child must conform in order to function as one element of the larger complex, the school. These include practicing safety and health rules, respecting his own and others' possessions, and following practices of personal care which indicate his readiness to partake of a formal educational experience. Thus he must keep his hands clean, get to and from school safely, protect his belongings, and avoid any number of physical hazards in and around the classroom and school.

ACHIEVEMENT

Mothers' responses in this category depict school as an opportunity for the child to attain increasing levels of achievement in preparation for his future. The school provides the child with a formal introduction to skills and concepts which are important to his future, and the mother is concerned with his endeavors to master them.

AFFECTIVE ELEMENTS

Here school may be considered as a novel situation to which the mother wants to introduce her child. While he may have had nursery school experience or may have older siblings from whom he has heard about school, actually going into that new building full of strangers will naturally have an impact. A mother may anticipate this fact, and she may focus her attention in differing amounts on either of two aspects of the situation. Responses in this category include mother's apparent awareness of negative and positive elements, as well as explicit statements of what she will do or say to the child.

Negative elements: School is a strange place; a young child may be afraid of its strangeness or of being left alone, without mother.

Positive elements: School is an exciting adventure, an experience to which a child naturally looks forward. He will meet other boys and girls his own age with whom he can play; there will be a

new adult who will help him learn many new skills; he is a "big boy" and old enough to be allowed the privilege of entering this new adventure. His mother and/or members of the family are eager to help him and pay attention to him at this crucial time; they may accompany him to or from school or, in advance, take him there for a visit or play school at home and discuss with him the things he will do there.

PREPARATION, VAGUE, IRRELEVANT

Responses to an open-ended question may constitute something less than a clear and organized answer to the question. A response may not be explicit enough to be clearly assigned to one of the scoring categories. Misinterpretation of the "first day" question may lead to an enumeration of things the mother has attempted to teach the child rather than, as the question asks, what she will tell him about that first day; unlike those behaviors of the mother which can be scored as "support," such attempts to prepare the child are concerned with isolated and specific tasks or ideas. Both of these types of response, the vague and the attempts at preparation, are important even though they may fail to characterize the mother's ideas about school or her method of communicating those ideas.

Finally, those responses which are not relevant to the question must be dealt with. These occur when the mother has misunderstood the question or when she follows a train of ideas leading away from the issue of school, most often toward comments on the child or on the amount of thought she has given to the question.

CATEGORIES FOR CODING METHOD OF COMMUNICATION

The content categories of obedience and achievement are also analyzed in terms of the mother's method of communicating this information to her child. Two modes of communication are considered: imperative and instructive.

IMPERATIVE COMMUNICATION

Content is conveyed to the child in terms of an unqualified command: the child must or must not do this, period. This command may be given without naming a source of authority, although this may be implied. Specific commands such as "Sit down," "Don't holler," are included here. Or a source of authority may be named in giving the command. This authority may be a person such as the teacher, a group such as the other children, or an institution such as the school or "they." (e.g., "Mind the teacher," "Do what they say.") The relationship between the child and the authority is, however, not explicit.

INSTRUCTIVE COMMUNICATION

As opposed to the imperative response, which includes only unqualified commands with no explicit reference to an authority or provision of a rationale, instructive responses provide some rationale for the behavior expected of the child, and thus allow - at least theoretically - some choice, some discretion on his part.

The rationale which is provided by instructive communication may be one of three types: a reference to the power structure of

the situation, a reference to broad social norms and expectations, or an attempt to individualize and personalize the situation. The code for instructive responses includes Ns (power), Nn (norms), and Np (person).

Instructive Power implies a hierarchical relationship between the child and some named authority; physical consequences of deviancy may be mentioned or implied. The child must obey those "over him."

Instructive Norms refers to a less explicit source of authority, namely society at large; there may be reference to status characteristics of the child (e.g., age, sex) and/or of others, but more often the reference is vague. In contrast to the hierarchical relationships implied or stated in instructive power, the emphasis here is on laterality of relationships, on role-definition as the rationale. The child is expected to behave in a certain way because he is a child; he interacts with the role of teacher, rather than with the teacher as a powerful being or as a personality.

Instructive-Person refers to personalization of the situation, taking into account unique characteristics of the child, of another, or of the situation. Given this particular context the child is expected to act in this way, because he is this particular child.

The rationale which accompanies the command, the "why" which justifies the demand for certain necessary behaviors or attitudes, may not itself be a command. The rationale which defines the TN response as contrasted with the TM (e.g., "Teacher is at school like mother is at home.") is often scored as a "Support" response. This general rule applies to all categories.

OBEDIENCE - SCORING CATEGORIES AND CRITERIA FOR SCORING

Teacher-Imperative (TM): A command to behave in a certain manner with reference to the teacher as the object of that behavior or as the authority for that behavior. The command may involve a specific behavior or a general attitude toward the teacher as authority; in either way, it is absolute.

Teacher-Instructive (TNs/n/p): A command to behave in a certain manner with reference to the teacher as the object of that behavior or as the source of authority for that behavior, accompanied by a rationale which characterizes the teacher as a source of sanctions for that behavior. The command may involve a specific behavior or a general orientation or attitude toward the teacher as an authority and source of sanctions.

Classroom-Instructive (CNs/n/p): A command to behave in a certain manner with reference to the child's place in the classroom, accompanied by a rationale which suggests or states a reason and/or sanctions for that behavior. The command may involve a specific behavior or a general attitude toward a standard of behavior which is accompanied by sanctions.

Classroom-Imperative (CM): A command to behave in a certain manner with reference to the child's place in the physical and social organization of the classroom. The command may involve a specific behavior or a general standard to which the child must conform in order to allow the classroom and the class to function smoothly as a learning situation; in either event, it is absolute.

Social and Peers-Imperative (SM): A command to behave in a certain manner with reference to the social situation, and with particular reference to the other children. The command may involve a specific behavior or a general standard. A source of authority may or may not be involved. The command is an absolute.

Social and Peers-Instructive (SN s/n/p): A command to behave in a certain manner with reference to the social situation, accompanied by a rationale which suggests or states a reason and/or sanctions for that behavior. The command may involve a specific behavior or a general attitude toward the reasons and sanctions for behaving in a socially acceptable manner.

Institutions - Imperative (IM): A command to conform to a set of rules and standards established by cultural or institutional authority which ensure that the child will fit smoothly into the total institutional complex of the school. Common items of concern are safety and health rules, respect for his own and others' possessions, and a general readiness to accept the dictates of an institutional authority. The command is absolute.

Institutions - Instructive (INs/n/p): A command to conform to a set of rules and standards established by a cultural or institutional authority, accompanied by a rationale or explanation of the necessity of such conformity.

Obedience - Vague (OV): A simple "be good" or "act nice"; or a reference to "how to behave" not elaborated. The response is concerned with obedience and compliance but has no referent or is not distinguishable on the Imperative - Instructive dimension.

ACHIEVEMENT - SCORING CATEGORIES AND CRITERIA FOR SCORING

Achievement - Imperative (AM): A command to work at mastering the skills and concepts of an academic nature which the school presents as tasks. The command is absolute.

Achievement - Instructive (ANs/n/p): A command to work at mastering academic skills and concepts, accompanied by a rationale which states the importance of such mastery to either the current or the future worth of the child, or a rationale which states that the mastery of academic tasks is an (or the) important reason for being in school.

AFFECTIVE ELEMENTS - SCORING CATEGORIES AND CRITERIA

Negative (s-): Mother is aware of the strangeness of this new experience, and/or the possible or probable fear with which her child will approach it. She may warn the child of the presence of these negative elements. And she may indicate that she expects him not to be afraid.

Negative with Support ($S\bar{+}$): Mother is aware of the presence of negative elements, but she also is aware of or will provide for positive aspects in the new experience. Any combination, then, of awareness of negative elements and awareness of or provision for positive elements, constitutes "$\bar{+}$" support.

Positive (S+): Mother does not mention the negative elements, fear and strangeness. She indicates awareness of or provision for only positive elements.

VAGUE, PREPARATION, IRRELEVANT - SCORING CATEGORIES AND CRITERIA

Vague (V): A response which is related to the school and the child but which is not clear or not explicit enough to be scored in terms of Obedience, Achievement, or Support.

Preparation (P): A response which refers to an experience which the child has had, is now having, or will have, which the mother believes prepares him for school but which does not clearly refer to the areas of Obedience, Achievement, or Support. The relevance of such experience may be actual or assumed; this differentiation is a matter of the clarity or explicitness of the response. A vague reference to such experience should be scored as Vague. A response which refers explicitly to an area of behavior for which the child will be or is prepared may be of two types:

P_1: Institutional, personal, and social skills, such as attendance at nursery school or experience with older siblings and friends, when the relationship between the experience and the area of behavior for which it prepares the child is explicitly stated.

P_2: Academic skills, such as playing school or buying books for the child; again, the relevance of the preparation to the school as an academic institution is explicitly stated.

Description of what the school situation will be like is scored as Preparation (P_1 or P_2) if mother explicitly states the link between the child's knowledge of school and preparation for the first day; as Affective (S+) if stated as something enjoyable or fun;

otherwise, neutral description or description referring to Obedience or Achievement areas but not clearly representative of those coding categories, is scored as Vague.

Irrelevant (RL): A response which results from misunderstanding of the question or a response which is tangential to it; a concluding remark, such as "That's all," when not preceded by a probe; a statement about the child, such as, "he is looking forward to it;" a response which does not answer the question and has no relevance to it. Such responses should be followed by repetition of the question or by suitable probing questions.